

OWNER'S MANUAL

30" LAWN TRACTORS

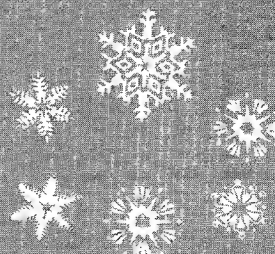
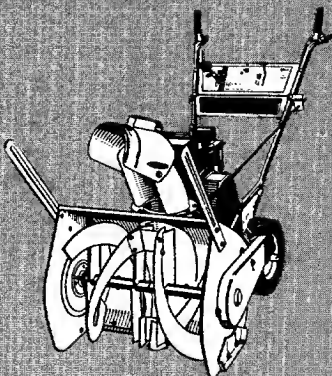
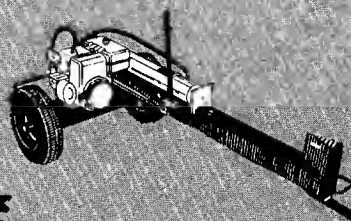
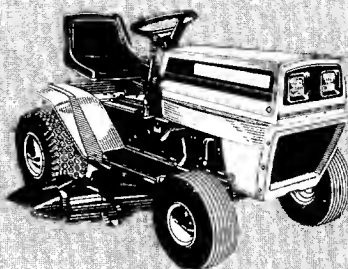
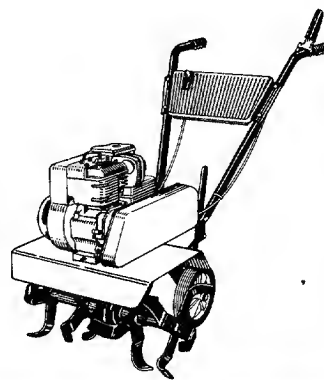
Model Numbers

132-390A

132-395A

Important:
Read Safety Rules and
Instructions Carefully

Thank you for purchasing an
American built product.



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LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

GRASS CATCHER Model 015 is available as optional equipment for the mowers shown in this manual.



WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE: Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

WARNING: TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.



WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—**READ THIS OWNER'S MANUAL.**
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up.

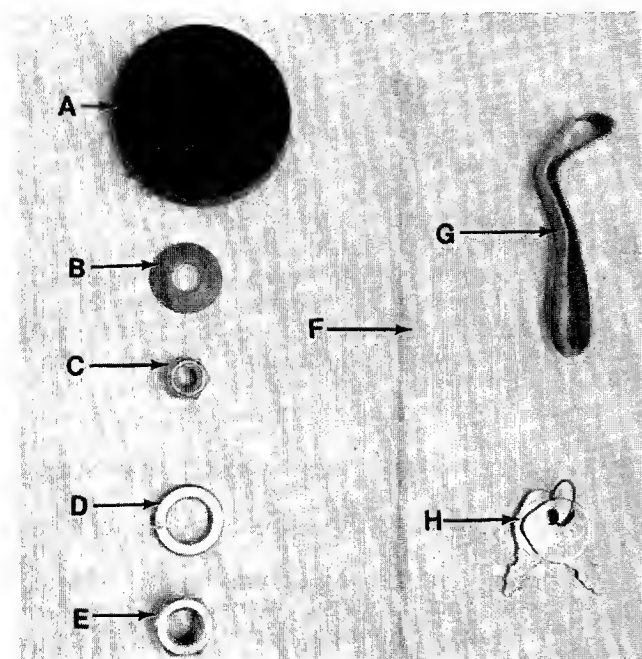


FIGURE 1.

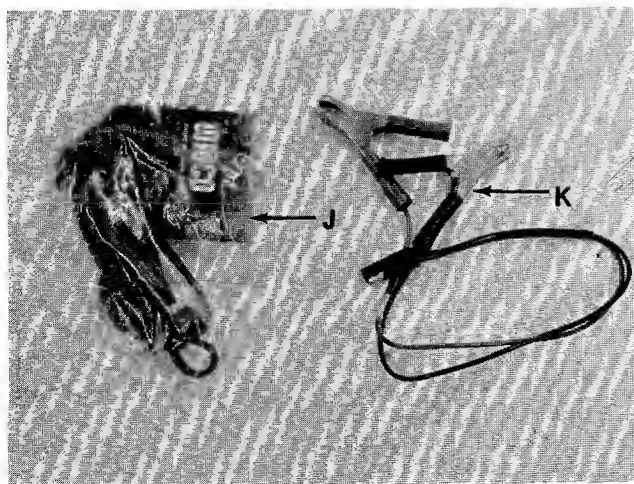


FIGURE 2.

ASSEMBLY INSTRUCTIONS



This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

Tools Required:

- (1) 7/16" Open End or Box Wrench
- (1) 1/2" Open End or Box Wrench
- (1) 3/4" Open End or Box Wrench
- (1) Adjustable Wrench

Contents of Hardware Pack: (See Figure 1)

- A (1) Steering Wheel Cap
- B (1) Belleville Washer
- C (1) Hex Lock Nut 5/16-18 Thread
- D (1) Lock Washer 1/2" I.D.
- E (1) Hex Nut 1/2-13 Thread
- F (1) Cable Tie*
- G (1) Battery Strap*
- H (2) Ignition Keys
- I (1) Battery Pack* (Not Shown)
- J (4) Foam Strips* (Not Shown)

Loose Parts in Carton: (See Figure 2)

- K (1) Battery Charger*
- L (1) Charger Leads*
- M (1) Seat (Not Shown)
- N (1) Steering Wheel (Not Shown)

*Electric Start Model 395 Only

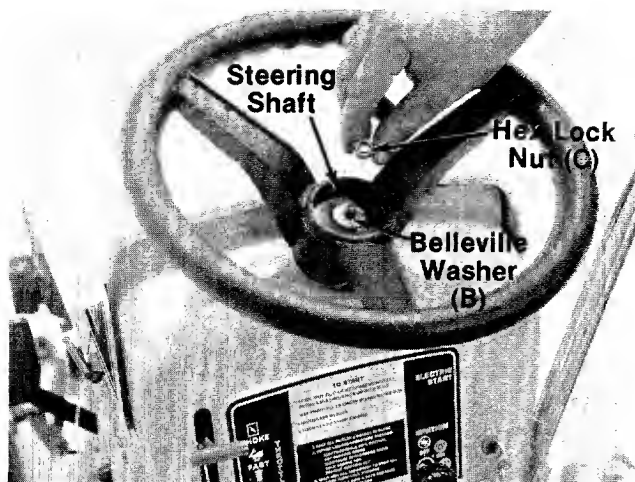


FIGURE 3.

NOTE

Reference to right-hand or left-hand side of machine is from the driver's seat facing forward.

- ← 1. Remove the lawn tractor and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.
2. Place steering wheel over steering shaft.
3. Secure with belleville washer (B) and hex lock nut (C). See figure 3.

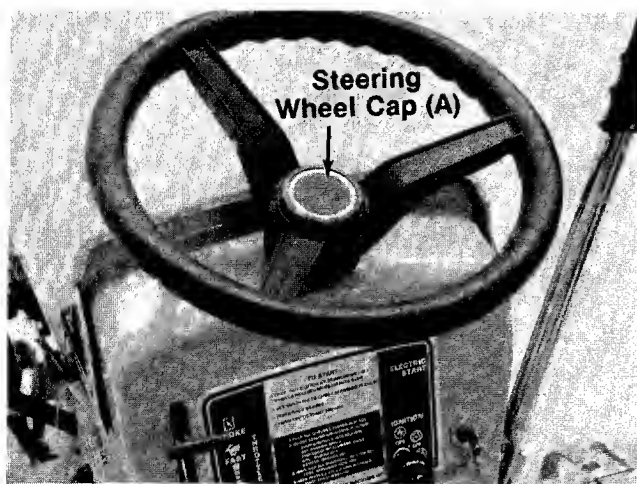


FIGURE 4.

- ← 4. Press the steering wheel cap (A) on the steering wheel by hand. See figure 4.

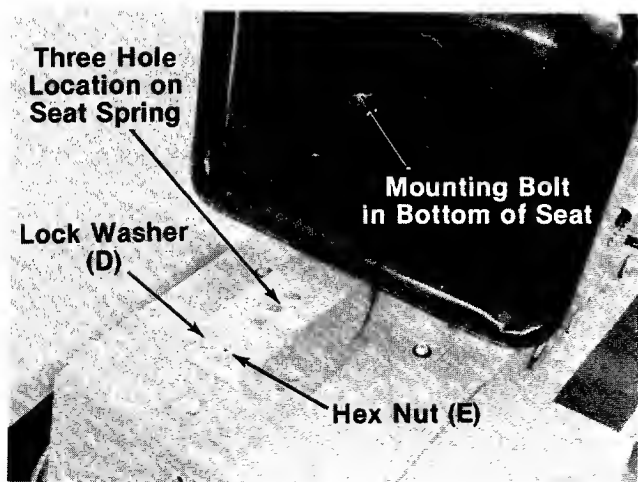


FIGURE 5.

- ← 5. The seat spring on the lawn tractor has three hole locations for mounting the seat (L). See figure 5.

The seat comes with the mounting bolt molded in the bottom of seat.

Secure the seat in position on seat spring with lock washer (D) and hex nut (E). See figure 5.

BATTERY INFORMATION FOR ELECTRIC START MODELS



WARNING

- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 6.



DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

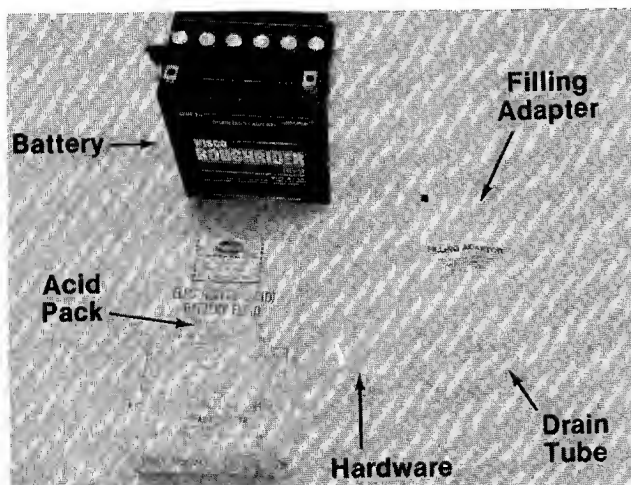


FIGURE 6.

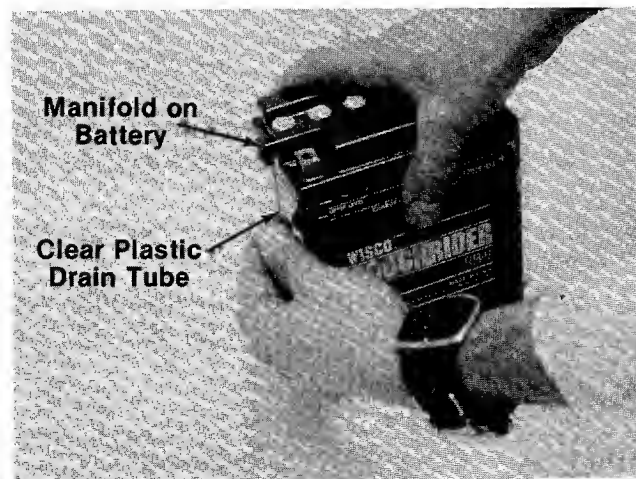


FIGURE 7.

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on manifold of battery. See figure 7.



NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

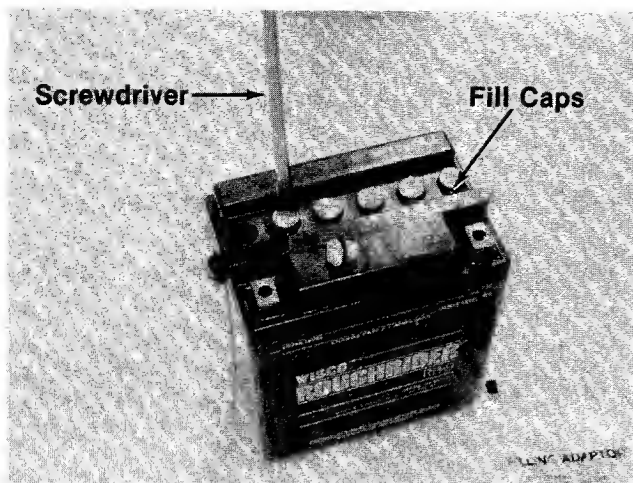


FIGURE 8.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 8.

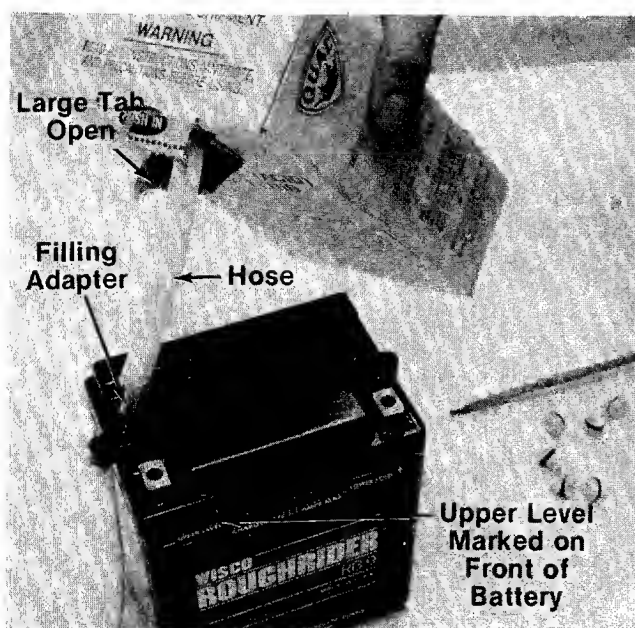


FIGURE 9.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use any sharp object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 9.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 9.
8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.



Battery contains sulfuric acid. Refer to warning on page 6. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

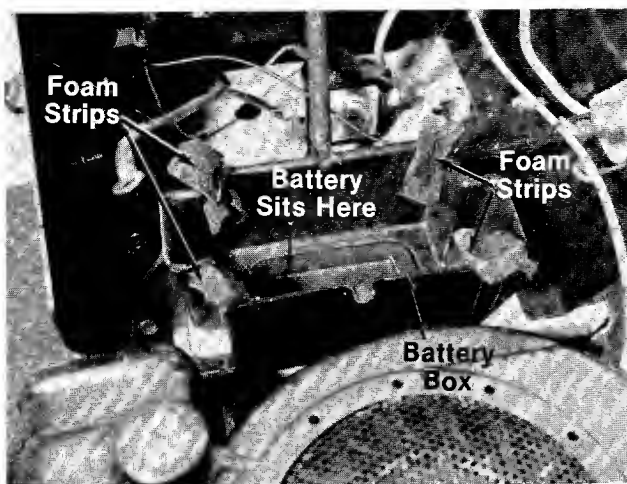


FIGURE 10.

- ← 9. Open the hood of the lawn tractor. Figure 10 shows the battery box in which the battery will be mounted.
10. Install the four foam strips into the battery box as follows.
 - A. Using a cloth, clean the inside of the battery box with a thinner or solvent.
 - B. Peel the paper off the foam strips to expose the adhesive backing. Press foam strips firmly into the corners of the battery box. See figure 10.

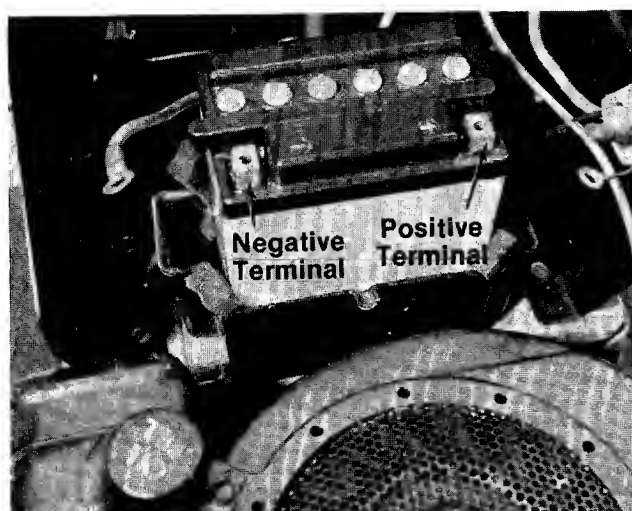


FIGURE 11.

- ← 11. Place the battery in the rider so that the positive terminal is facing the left side of the unit. See figure 11.

NOTE

Right and left hand sides of the unit are determined by sitting on the seat in the operating position, facing forward.

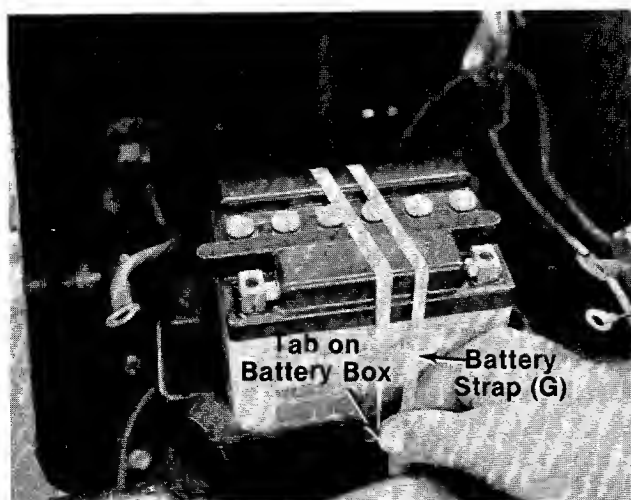


FIGURE 12.

- ← 12. Secure the battery to the battery box by stretching the battery strap (G) across the battery. Loop each end around the tab on the sides of the battery box. See figure 12.

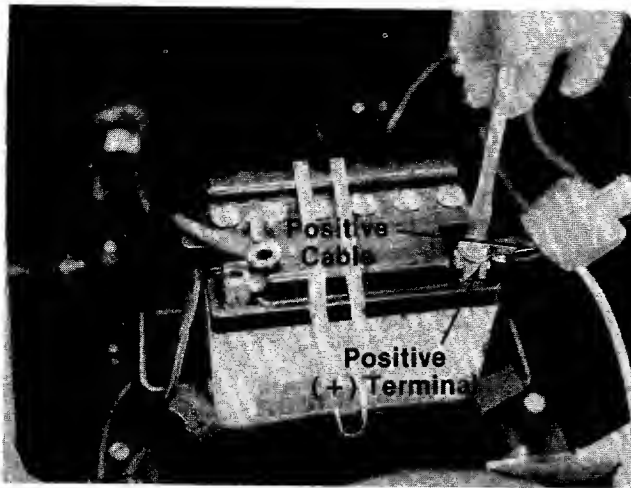


FIGURE 13.

13. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Slide the rubber boot back which is on the positive cable. Place the positive (heavy red wire) cable and the small red wire (with a fuse holder in it) on the positive terminal. Secure with screw and lock washer provided. See figure 13.

14. Slide the square nut (provided with battery hardware) into the negative (-) terminal. Place the negative (heavy red wire) cable on the negative terminal. Secure with screw and lock washer provided.

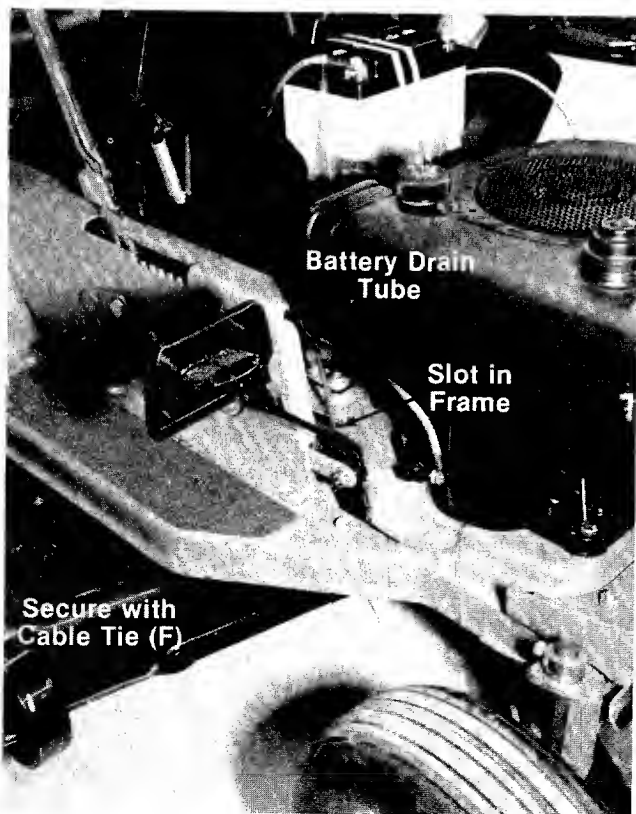


FIGURE 14.

15. Feed the plastic drain tube through the slot in the frame as shown in figure 14.

16. Using cable tie (F), secure battery drain tube to the shoulder bolt at the brake pedal, underneath the deck. Cut off excess end of cable tie. See reference number 40 on page 26.

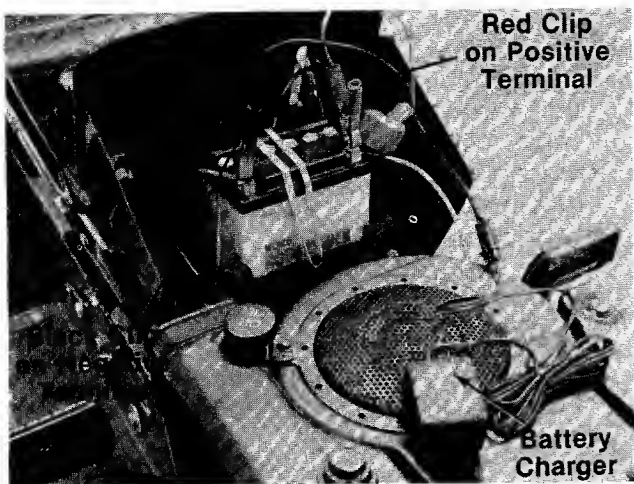


FIGURE 15.

17. The battery can be slow charged (do not fast charge) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.



WARNING

The battery charger provided is specially designed for the battery in this unit. **Do not use any other charger.** A charging rate in excess of the above specifications will buckle and warp the positive plates and/or perforate the separators.

To Attach the Battery Charger:

1. Attach the red clip on the charger to the positive terminal.
2. Attach the black clip on the charger to the negative terminal.
3. Plug the other end of the battery charger into a standard household 110 A.C. outlet.

To Remove the Battery Charger:

1. Unplug the charger from the 110 A.C. outlet.
2. Remove the black clip from the negative terminal.
3. Remove the red clip from the positive terminal.



WARNING

Failure to follow the above procedure when charging a battery can cause the gases in the battery to explode.



NOTE

Charging rate after battery has been put into operation: The battery is to be charged with the charger provided, for a period of 14-16 hours. **NO LONGER THAN 30 HOURS.**



CAUTION

After battery has been in service, add only distilled water. **DO NOT ADD ACID.**

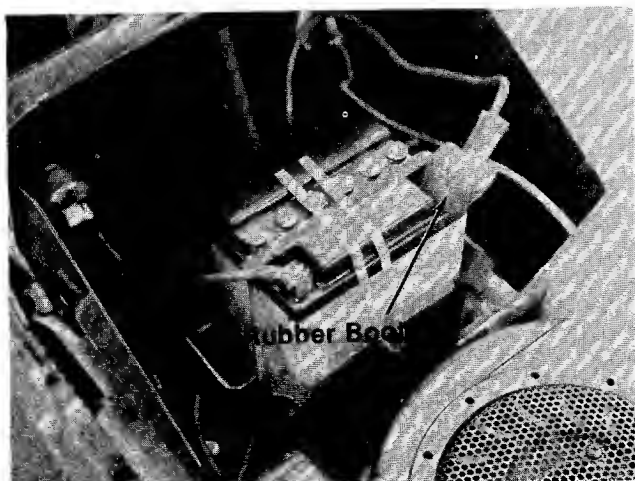


FIGURE 16.

18. Slide the rubber boot over the positive terminal. See figure 16.

CONTROLS (See Figure 17)

This manual should be read in its entirety before operating the lawn tractor. The more you know and understand about the machine and its operation, the better job it will do for you. While reading the manual, compare the illustrations with your tractor to familiarize yourself with the locations of various controls, lubrication points, attachments and adjustment features.

Study the operating instructions and safety precautions thoroughly to insure proper functioning of your tractor and to prevent injury to yourself and others. Be sure to save this manual for future reference.

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and to activate the choke on the engine. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. Pushing the throttle all the way forward past FAST, will choke the engine. See figure 17.

IGNITION KEY

Recoil Model. The key must be turned to the "ON" position before you pull the recoil handle to start the engine. Turn the key to the left to the "OFF" position to stop the engine. Remove the key when the unit is not in use. See figure 20.

Electric Start Model. The key must be turned to the "START" position to start the engine. After the engine is running, let the key return to the "ON" position. Turn the key to the "OFF" position to stop the engine. Remove the key when the mower is not in use. See figure 17.

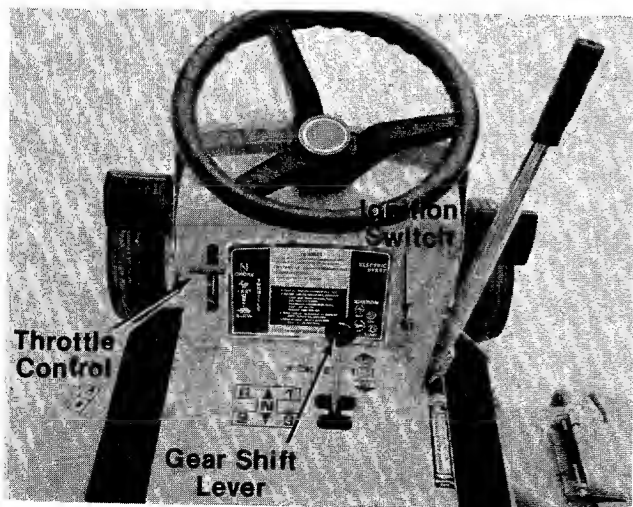


FIGURE 17.

INTERLOCKS (Not Shown)

Interlock safety switches are located on the clutch pedal, the lift and disengagement lever and gear shift lever.

Before the engine will start, the clutch pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the lift and disengagement must be in the disengaged position.

BRAKE

The brake pedal is located on the right hand side of the tractor and is operated by depressing it with your right foot. See figure 18.

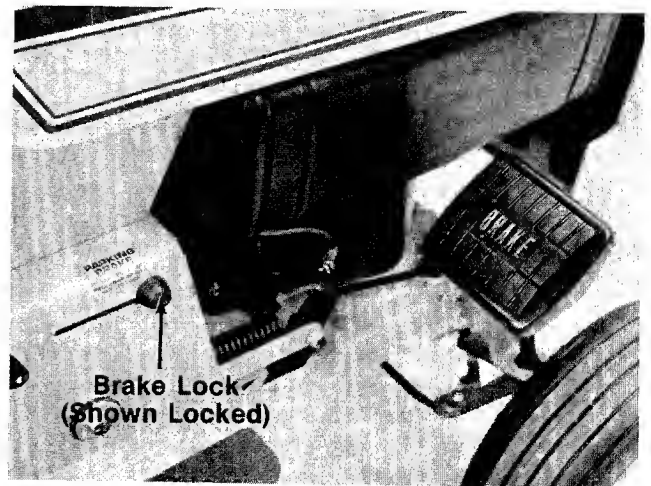


FIGURE 18.

BRAKE LOCK

The brake lock is located on the right hand side of the tractor. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the brake pedal. Always lock the brake when you park the mower. See figure 18.

CLUTCH

The clutch pedal is located on the left hand side of the tractor and is operated with your left foot. Depress the pedal to disengage the drive mechanism. Release the clutch slowly to engage. The clutch and brake pedals must both be depressed when stopping the tractor. When shifting gears, the clutch pedal must be disengaged, and the tractor cannot be moving. See figure 19.

CLUTCH LOCK

When the clutch pedal is depressed all the way, it can be locked by lifting up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 19.



The clutch pedal must be depressed to start the engine.

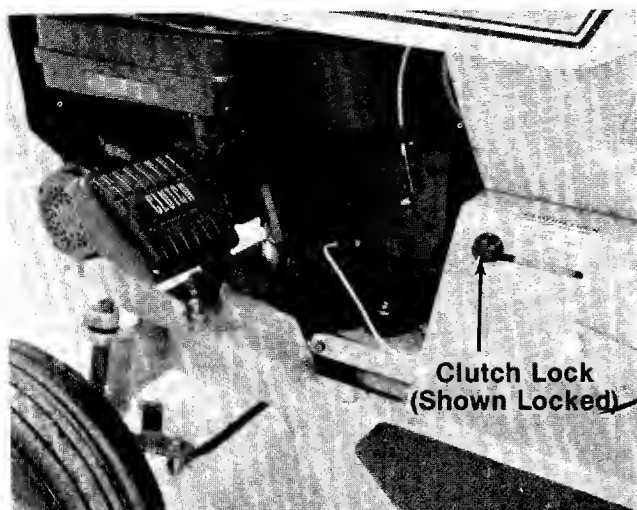


FIGURE 19.

RECOIL STARTER HANDLE (Model 390 Only)

The recoil starter handle is located on the right side of the dashboard. The recoil starter handle can either be pulled while seated on the rider or pulled while standing behind the rider. The ignition key must be on before the engine will start. After the engine starts, the recoil starter handle must be returned and locked into the dashboard before the blade or clutch are engaged. The engine will stop if these instructions are not followed. See figure 20.



FIGURE 20.

GEAR SHIFT LEVER

Three Speed—The three speed transmission has three forward speeds, neutral and reverse. The clutch pedal must be depressed to shift gears. It may be necessary to release the clutch pedal slightly to shift the gear shift lever. Do not force the shift lever.

- 1st Gear—Heavy Cutting
- 2nd Gear—Medium Cutting
- 3rd Gear—Medium Cutting
- N—Neutral
- R—Reverse

See figures 17 and 21.

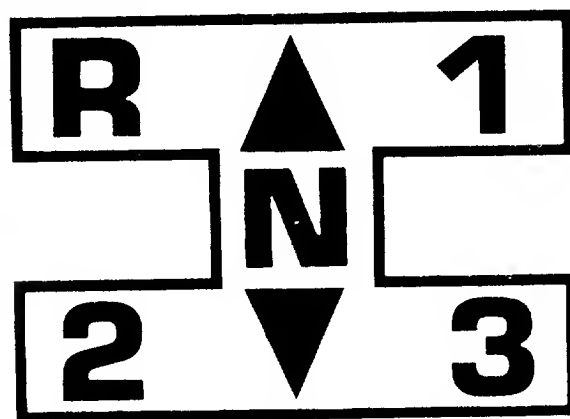


FIGURE 21. THREE SPEED TRANSMISSION

MOWER LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blade.



The lift and disengagement lever **must** be in the disengaged position when starting the engine and when shifting into reverse. See figure 22.

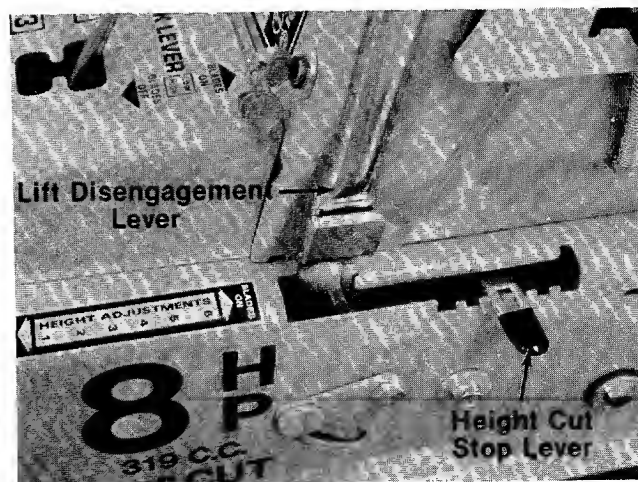


FIGURE 22.

HEIGHT OF CUT CONTROLS

The cutting controls consist of the height of cut stop and the wheel height adjusters.

Height of Cut Stop. See figure 22. Lift the stop and set it at the desired cutting height. Allow the lift and disengagement lever to come forward to rest against the height of cut stop.

Wheel Height Adjuster. Move the lever towards the wheel and set it in the desired cutting height position. See figure 23. Both wheels must be in the same relative position.

SETTING THE CUTTING HEIGHT

The cutting height of the mower can be set in two different ways: Full Float position where the deck follows the contour of the ground, and the Suspended position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position: Set the wheel height adjusters in the desired cutting height as indicated in figure 23. Set height of cut stop in the lowest position. See figure 22.

To set the cutting deck in the suspended position: Set the height of cut stop in the desired cutting height. Then set the deck wheels so they just clear the ground.

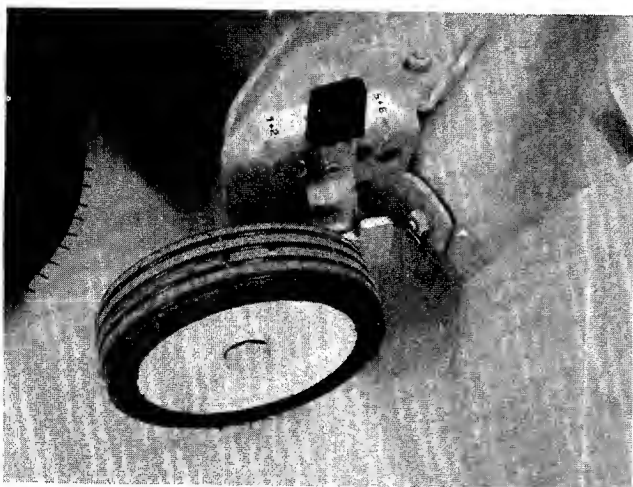


FIGURE 23.

OPERATION

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended pressure should be approximately 15 p.s.i. Equal tire pressure should be maintained on all tires. Maximum tire pressure is 30 p.s.i.

CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment clutch
 - d. Shut off engine
 - e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

CAUTION

**DO NOT OPERATE
MOWER UNLESS
GUARD OR ENTIRE
GRASS CATCHER IS
IN ITS PROPER PLACE.**

STARTING THE ENGINE



This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.



Do not operate the rider if the interlock system is malfunctioning because it is a safety device, designed for protection.

1. Be sure the crankcase is filled with oil as recommended in the engine manual. Put **regular** gasoline in the gasoline tank.

2. Attach the wire to the spark plug.
3. Depress the brake pedal and lock it down with the brake lock. See figure 18.
4. Depress the clutch pedal and lock it down with the clutch lock. See figure 19.
5. Move the lift and disengagement lever backward to the disengaged position and lock it. See figure 22.
6. Set the throttle control lever in the "CHOKE" position. See figure 17.
7. a. **Recoil Model.** Turn the ignition key to the "ON" position. Twist the recoil starter handle until it is free and pull it with a quick steady motion. After the engine starts, return the recoil starter handle and twist it until it locks. See figure 20.
b. **Electric Start Model.** Turn the ignition key to the "START" position. As soon as the engine starts, let the key return to the "ON" position. See figure 17.
Slowly return the throttle to the running position as soon as the engine starts.
8. To stop the engine, turn the ignition key to the "OFF" position. Remove the key when the unit is not in use.

PUTTING THE LAWN TRACTOR IN MOTION

1. Advance the throttle control from 3/4 to full throttle to prevent strain on the engine and to operate the cutting blades.
2. Depress the clutch pedal so the clutch lock releases.
3. Depress the brake pedal so the brake lock releases.



CAUTION

Parking Brake **must** be disengaged before unit is put into motion.

4. Place the gear shift lever in the number 1 position on the three speed unit.
5. Slowly release the clutch pedal.
6. To stop the unit, depress the clutch pedal and the brake pedal.



NOTE

Unit is equipped with separate brake and clutch pedals. It is necessary to disengage clutch when applying brakes to stop.

7. The blade can be engaged either while moving forward or while standing still. Move the lift and disengagement lever forward slowly until the blade is running.



NOTE

As you become more familiar with the tractor, stop the unit and shift into a higher gear.

STOPPING

Engine—Turn the ignition key to the left to the "OFF" position.

Lawn Tractor—Depress the clutch and brake pedals.

Blades—Move the lift and disengagement lever all the way to the rear and lock it.



IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

ADJUSTMENTS



CAUTION

Do not at any time make any adjustment to lawn tractor without first stopping engine and disconnecting spark plug wire.

CHAIN ADJUSTMENT

After the first five hours of operation, the initial slack should be removed from the chain. The chain should be tight enough so that it deflects approximately 1/2" when it is depressed with the thumb.

To tighten the chain, loosen the four locking nuts on each side of the rear axle. See figure 24.

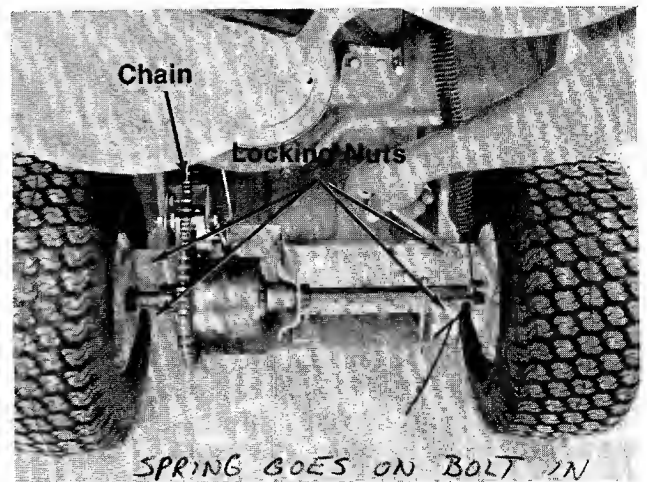


FIGURE 24. TRANSAXLE BRAKE 2nd SIDE

5/16" - 18 x 1.5 Lg

Tighten the adjusting nuts until the proper chain tension is obtained. See figure 25.

Tighten the locking nuts on the rear axle. See figure 24.

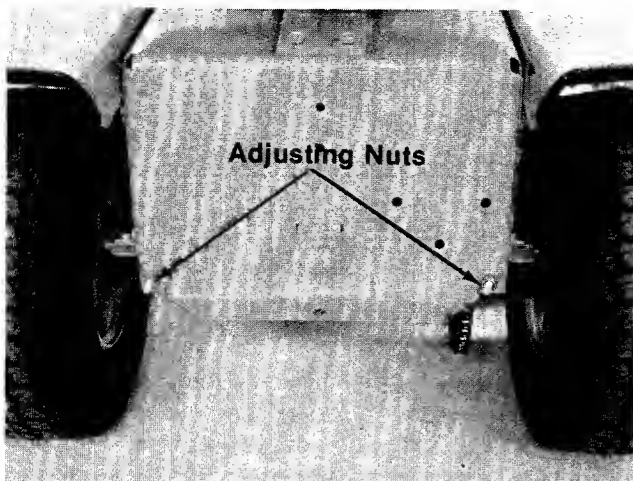


FIGURE 25.

BRAKE ADJUSTMENT (See figure 26)

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.

The brake is located by the right rear wheel inside the frame. To adjust the brake, remove the cotter pin. Tighten the castle nut one half turn and then test the brakes. After attaining the proper adjustment, replace the cotter pin.

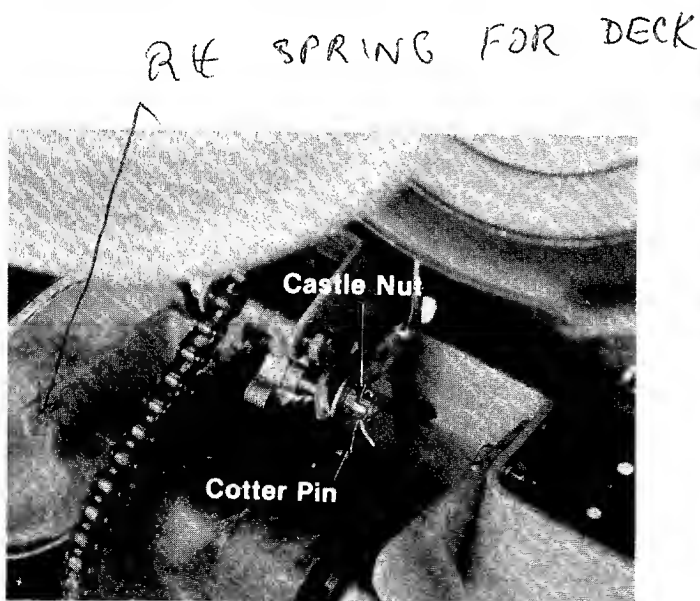


FIGURE 26.

CARBURETOR ADJUSTMENT



WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

If carburetor adjustment is required, refer to the separate engine manual packed with your lawn tractor.

LUBRICATION



IMPORTANT

Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn tractor.

1. Front Wheel Bearings (4)—Lubricate with light oil once a season. See figure 27. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.
2. Steering Gears—Lubricate the two gears with automotive multi-purpose grease once a season.
3. Pivot Bolt—Lubricate with light oil once a season. See figure 27.

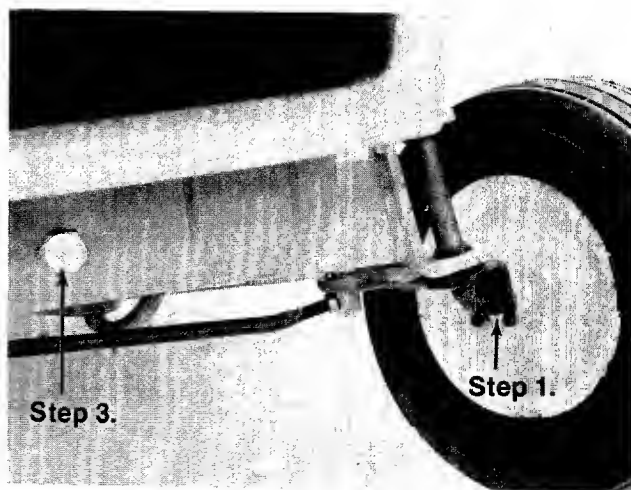


FIGURE 27.

4. Differential—It is lubricated at the factory with 3 ounces of high temperature grease (450°F.). The grease should only be checked or replaced if the differential is disassembled for repair. See figure 28.

5. Transmission—It is lubricated at the factory with 12 ounces of E.P. Lithium grease. The grease should only be checked or replaced if the transmission is disassembled for repair.
6. Steering Column Bearings (2)—Oil once a season with light oil.
7. Rear Axle Bearings (3)—They require no lubrication. See figure 28.



WARNING

Do not get oil on the sprocket or brake pads.

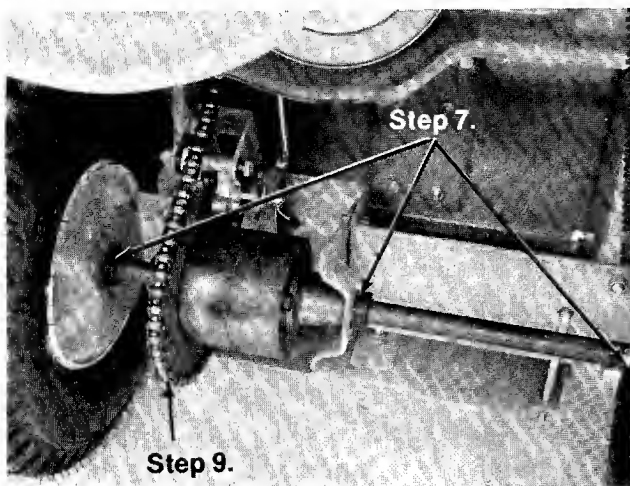


FIGURE 28.

8. Steering Shaft Bearings (2)—They require no lubrication.
9. Chain—Remove and clean with kerosene. Lubricate with an oil soaked rag. See figure 28.

The following items have sealed bearings and require no further lubrication.

Blade Spindle Bearings
Tie Rod Ends
Idler Bearings

MAINTENANCE

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Check oil level before starting engine and after every 5 hours of operation. Be sure oil level is maintained to FULL mark on dipstick.

Change oil after first 5 hours of operation. Thereafter change oil every 25 hours of operation. Remove oil drain plug and drain oil while engine is warm. Replace drain plug. Remove dipstick and refill with new oil of proper grade. Replace dipstick. See figure 29.

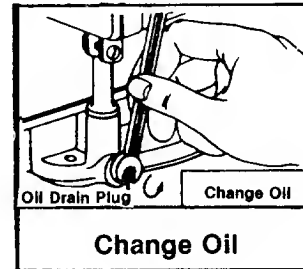


FIGURE 29.

MOWER DECK

The underside of the mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next mowing.

The deck may be cleaned by washing with a stream of water from a garden hose.

Be sure to disconnect the spark plug wire and ground it while performing this maintenance.

CUTTING BLADE

A. Removal for Sharpening or Replacement



WARNING

Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.



NOTE

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, **ALL** nuts and bolts must be checked periodically for correct tightness.

ENGINE

Refer to separate engine manual for maintenance procedures.

BELT REPLACEMENT



WARNING

Before up-ending vehicle for maintenance, position it on a hard level surface. Make sure area is clear of children and pets. Secure (tie) in place.

Disconnect the spark plug wire and ground it against the engine.

To prevent gasoline from leaking from the gasoline tank, remove the cap, place a piece of plastic film over the neck of the tank, screw on the cap, or drain tank.

1. Put the lift lever in the disengaged position.
2. Remove the belt keeper and shoulder bolt on the engine pulley. See figure 30.

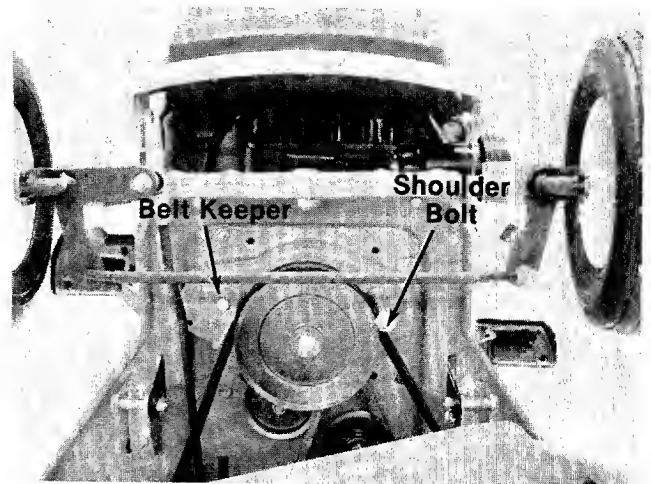


FIGURE 30.

3. Remove the blade belt from the engine pulley.
4. Put the lift lever in the engaged position.
5. Remove the two tension springs on the rear of the deck.
6. Remove the six pins holding the deck to the frame. See figure 31.
7. Lift off the deck and set it aside.

BLADE BELT (See figure 32)

1. Take off both belt guards on the deck.
2. Remove and replace the belt with a new one.

TRANSMISSION BELT (See figure 31)

1. Remove the engine belt guard from the engine pulley by removing the two front engine bolts.
2. Remove the two belt guards from the transmission pulley.
3. Remove the V-idler pulley.
4. Remove and replace the transmission belt and reinstall pulley.

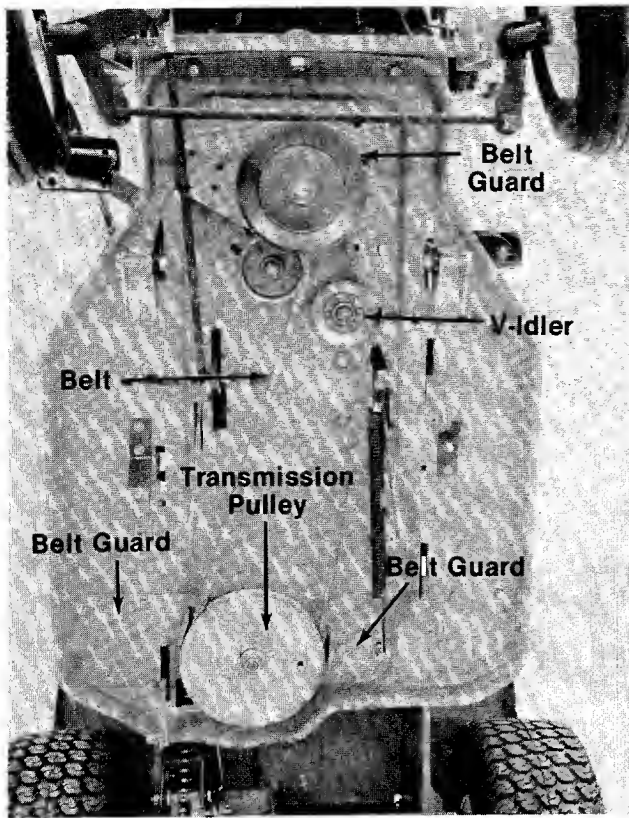


FIGURE 31.

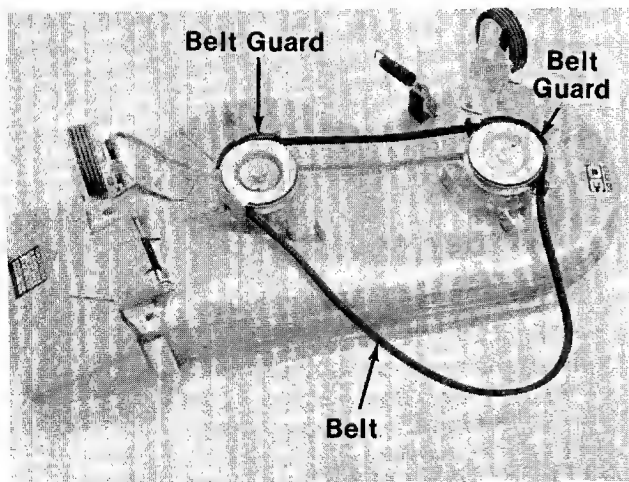


FIGURE 32.

BATTERY REMOVAL OR INSTALLATION



WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the **FRAME OF THE UNIT WITH THE DEAD BATTERY.**



WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or good quality drinking water. **NEVER** add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. **NEVER** store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravi-

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte



NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

OFF-SEASON STORAGE



NOTE

Engines to be stored over 30 days should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, fuel filters, fuel lines and tank.

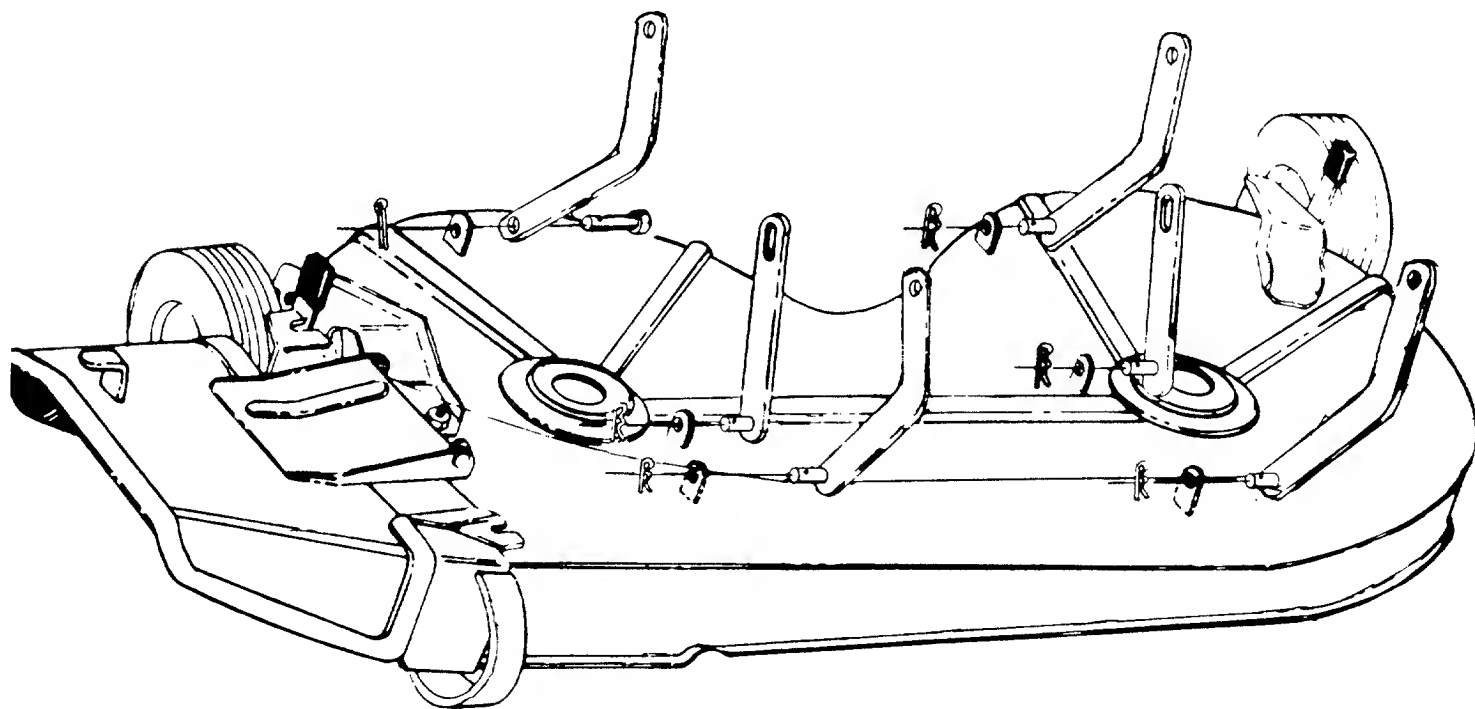
1. Remove all fuel from fuel tank. Run the engine until it stops from lack of fuel. The small amount of fuel that remains in the sump of the tank should then be removed by absorbing it with a clean, dry cloth.
2. While engine is still warm, drain oil from crankcase. Refill the fresh oil.
3. Remove spark plug, pour 1 ounce of SAE 30 oil into cylinder and crank slowly to distribute oil. To prevent accidental starting, DO NOT replace the spark plug.
4. Clean dirt and chaff from cylinder, cylinder head fins and blower housing.
5. Clean all grass from underside of deck.
6. Clean the air filter.
7. Place blocks under frame of mower so that the wheels are off the ground.
8. Cover all bare metal parts, such as the mowing edge of the blades, with grease to prevent rusting.
9. Cover the mower with a tarpaulin or other protective covering.

DECK LINKAGE



NOTE

Refer to illustration below for proper deck link hook-up. If the deck is removed for any reason use the illustration below for correct assembly.



TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blow fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	<p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger.</p> <p>Trickle Charger. Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1½ amp.</p> <p>Alternator (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <div style="text-align: center;"> </div> <p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p>
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade spindles, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves in cut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

BELT TROUBLE SHOOTING CHART

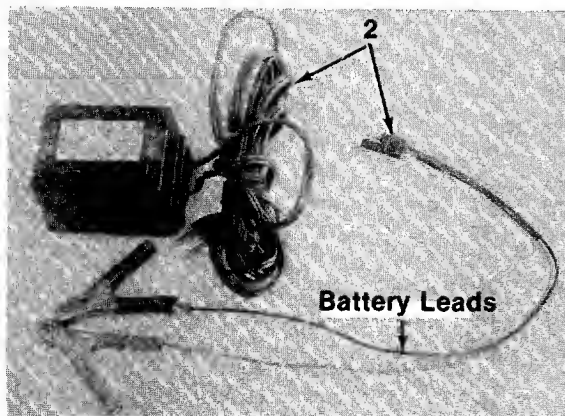
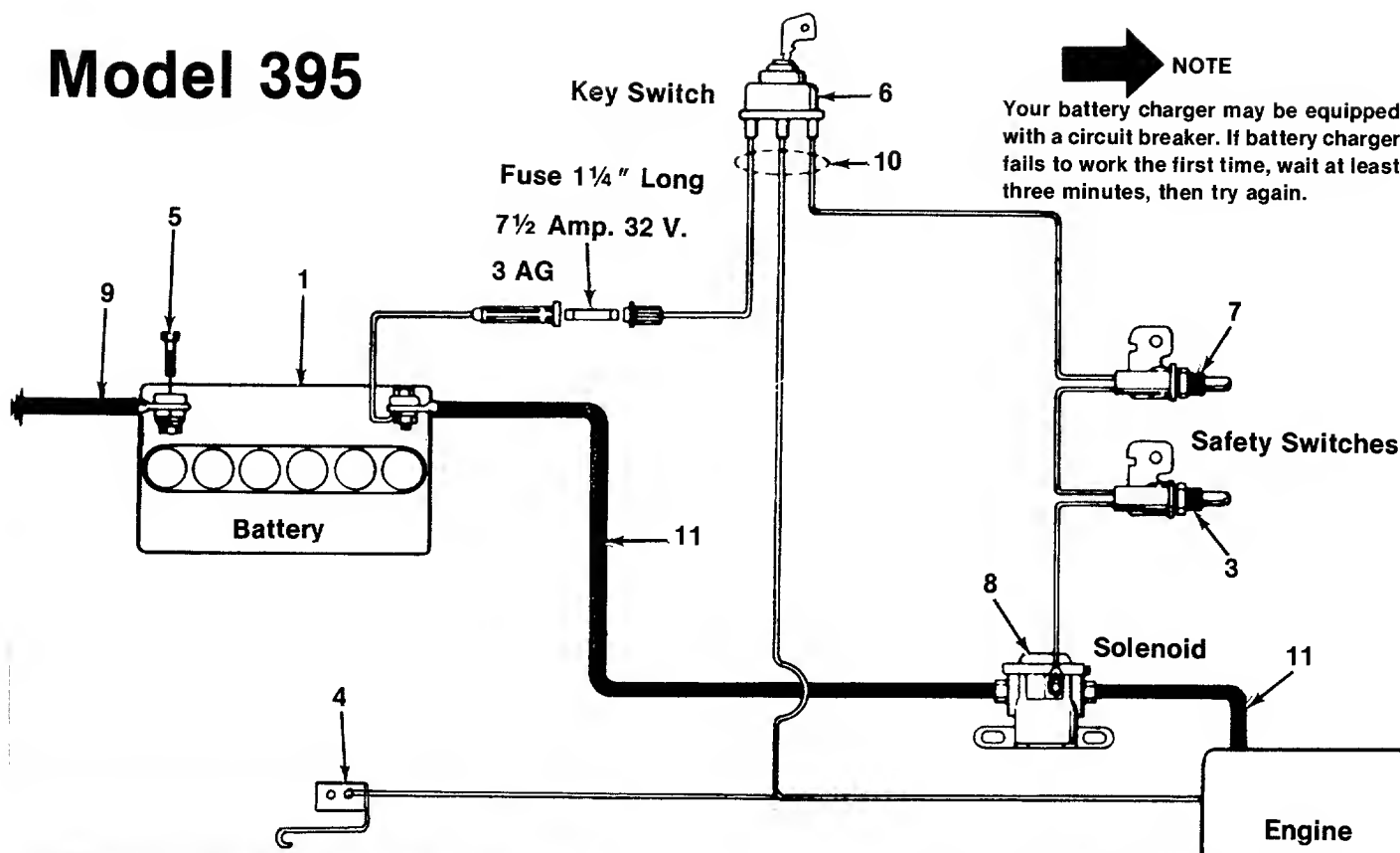
Failure	Probable Cause	Corrective Action
1 Broken Belt	1A Sudden stop or shock load to belt 1B Incorrect belt used 1C Abrupt engagement 1D Defective or damaged belt	1A Inspect rider for cause such as foreign objects stuck in between deck and frame or belt path. Remove obstruction and inspect for damage. Replace belt per parts list in this manual. 1B Replace with proper belt only. See parts list in this manual. Roll belt onto pulley. Do not use a screwdriver to push or pry belt onto pulley. The sharp bend can damage internal cords. 1C Slower engagement required. 1D Refer to 1B.
2 Belt Shreds	2A Belt guides or guards incorrectly adjusted 2B Pulleys not aligned 2C Bad pulley—rough, rusty, chipped, bent, frozen bearing, etc.	2A Belt guides and guards should be adjusted to approximately 1/16 to 1/8 inch from belt when in the engaged position. 2B Realign pulleys to be within approximately 1/16 inch of each other. Check with straight edge. Be sure fastening hardware is tight. 2C Replace as necessary. Adjust as per 2B.
3 Belt Comes Off	3A Belt stretched 3B Broken or weak idler spring	3A Adjust as necessary when applicable. Refer to 1B. 3B Replace.

TROUBLE SHOOTING CHART FOR RECOIL START MODELS

CAUTION: ALWAYS DISCONNECT SPARK PLUG BEFORE ATTEMPTING ANY REMEDY.

TROUBLE	LOOK FOR	REMEDY
Engine will not start when recoil handle is pulled.	Clutch and blade not disengaged.	Clutch pedal must be depressed and blade must be shut off.
	Ignition key not in the ON position.	Turn on the ignition key.
	Throttle not in the starting position.	Check owner's guide for correct position for throttle control for starting.
	No spark to spark plug.	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have the engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor.	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line is plugged. Remove and clean.
	Air filter dirty.	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
	Mechanical failure (wires or switch).	The interlock system includes two mechanical activated switches which are wired in parallel. If the buttons on both switches are not depressed at least 1/8", the magneto will be grounded and the engine will not start. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Disconnect the yellow wire where it attaches to the primary wire from the breaker assembly on the engine. Try to start the engine. If the engine does not start , the problem is in the engine (e.g. no fuel or no ignition). If the engine does start, the problem is in the safety system. Check the following: 1. The interlock wire may be grounded by being pinched or rubbing through the insulation. Tape or replace the wire. 2. The bolt on the flat spring behind the recoil starter where the yellow wire attaches must be insulated from the spring. Use a continuity tester. If it is not insulated, remove the bolt and nut, and replace the two fiber washers and reassemble.
Engine stops when the mower blade is engaged or the clutch is released.	Recoil handle is not in proper position.	After the engine starts, the recoil starter handle must be pushed into the dashboard and turned a quarter turn either direction to lock it in place.
Engine smokes. Excessive vibration	Engine loses crankcase vacuum.	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade spindles, blade adapters, keys and bolts for tightness or damage. Tighten or replace any damaged parts.
	Bent blade.	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips.	Engine speed too low.	Throttle must be set between 3/4 and full throttle.
	Transmission selection.	Use lower transmission gear. The slower your ground speed, the better the quality of cut.
	Blades short or dull.	Sharpen or replace blades (uncut strip problem only).

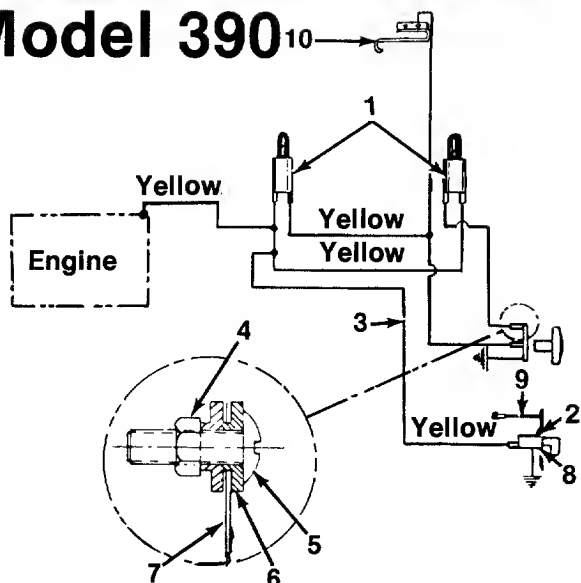
Model 395



PARTS LIST FOR SCHEMATIC MODEL 395

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0514		Battery	
2	725-0507		Battery Charger	
	725-0579		Charger Clip Adapter Wire	
3	725-0819		Safety Switch—Push Button (2 pole) (Blade)	N
4	725-0759		Spring Switch (Shift Lever)	N
5	710-0252		Hex Bolt 1/4-20 x .75 Lg.*	
	736-0329		Lock Washer 1/4"*	
	712-0287		Hex Nut 1/4-20 Thd.*	
6	725-0267		Key Switch	
	725-0201		Key	
7	725-0268		Safety Switch (Clutch)	
8	725-0771		Solenoid	N
9	725-0387		Ground Wire	
10	725-0818		Wire Harness	N
11	725-0121		Electric Wire	

Model 390

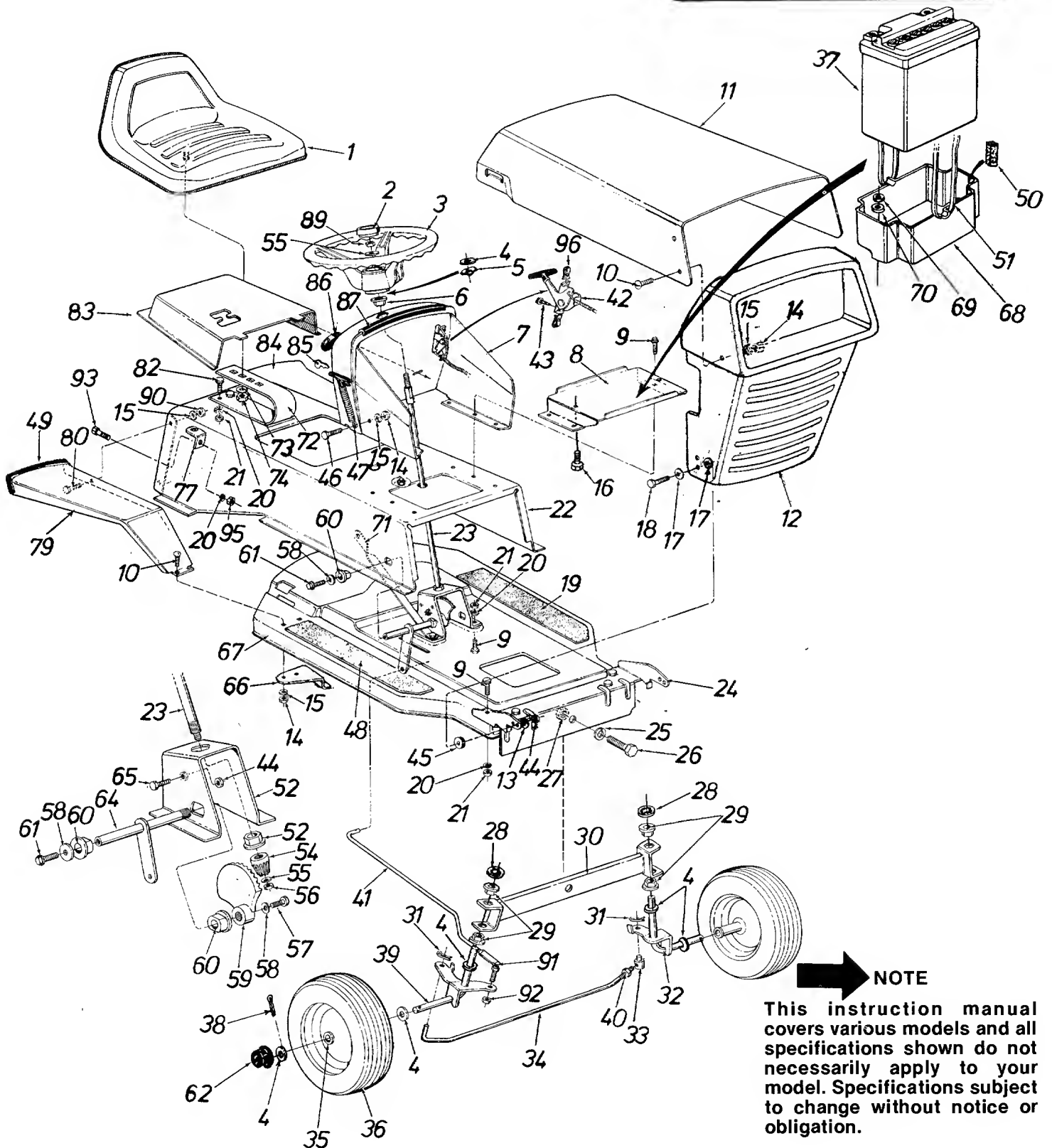


PARTS LIST FOR SCHEMATIC MODEL 390

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0269		Safety Switch—Red (Clutch and Blade)	
2	725-0266		Magneto Ignition Switch w/Nut	
	725-0201		Ignition Key	
3	725-0816		Wire Harness	N
4	712-0121		Hex Nut #10-24	
5	710-0425		Truss Mach. Scr. #10-24 x .62	
6	736-0338		Fiber Washer (2 Req'd.)	
7	732-0257		Switch Spring	
8	736-0225		Internal Lock Washer 5/8 I.D.	
9	725-0297		Ground Wire	
10	725-0759		Spring Switch (Shift Lever)	N

Models 390 and 395

IF YOU WRITE TO US ABOUT THIS ARTICLE
OR IF YOU ORDER REPLACEMENT PARTS AL-
WAYS MENTION THIS MODEL & SERIAL NO
MODEL

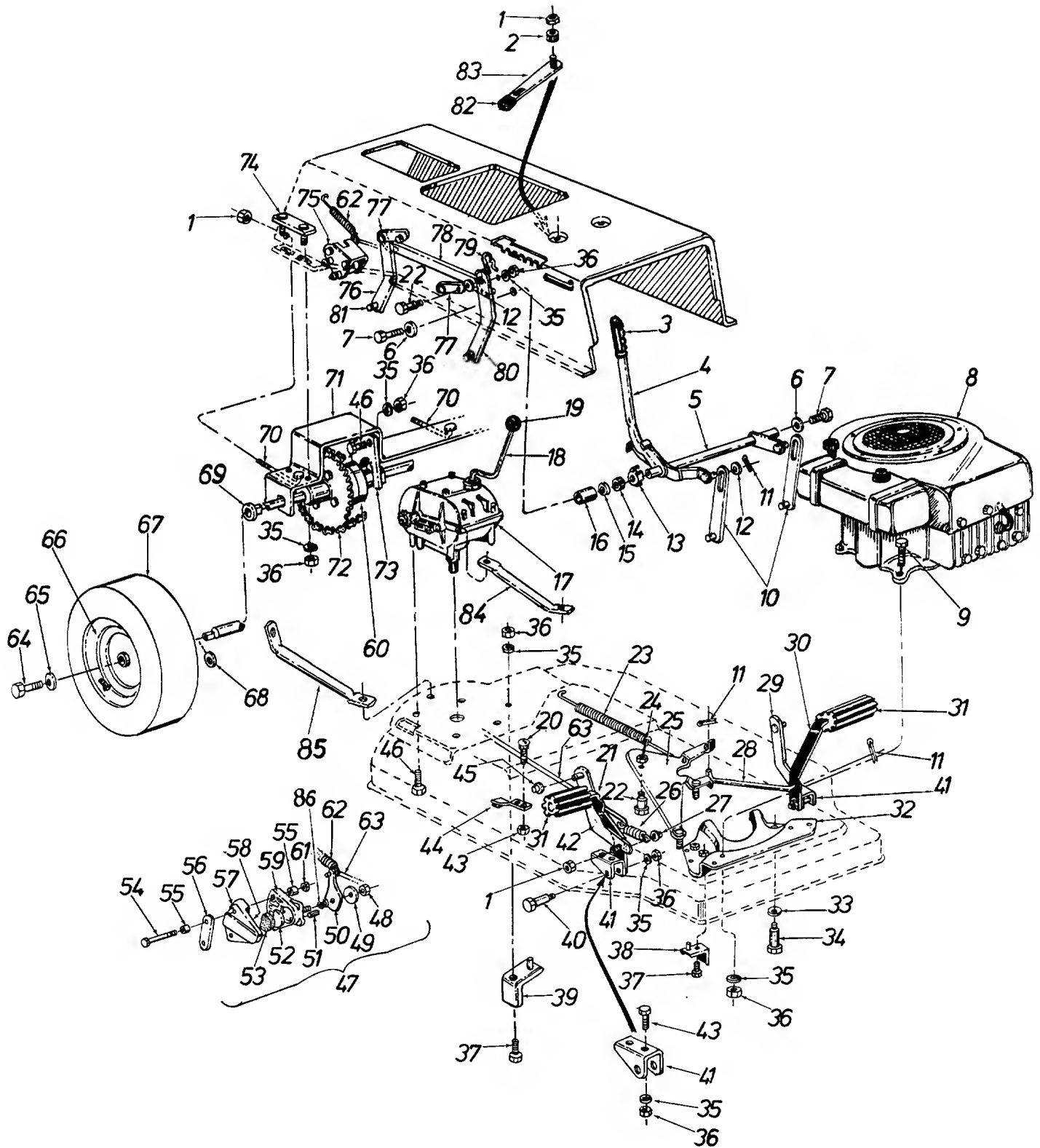


Models 390 and 395

PARTS LIST FOR MODELS 390 AND 395 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	757-0264		Seat Assembly		44	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
2	731-0220		Cap for Steering Wheel		45	748-0190		Spacer	
3	731-0219		12" Dia. Steering Wheel		46	710-0289		Hex Scr. 1/4-20 x .50" Lg.*	
4	736-0156		Fl-Wash. .635 I.D. x 1.120 O.D.		47	723-0296		Hood Lock Ass'y.	
5	736-0174		Wave Wash. .66 I.D. x .88 O.D.		48	723-0304		Foot Mat—R.H.	
6	748-0227		Hex Flange Brg. .630 I.D.		49	731-0497		Edge Strip (6.5" Lg.)	
7	12740		Dash Panel Ass'y.—Recoil (390)		50	722-0135		P.V.C. Foam 1" x 2" x 1/2" (395)	
	12742		Dash Panel Ass'y.—Elect. (395)		51	735-0204		Battery Strap (395)	
					52	12850		Steering Gear Shaft Ass'y.	
8	12747		Battery Bracket (395)		53	748-0228		Hex Flange Brg. .505 I.D.	
9	710-0198		Hex Sems Scr. 5/16-18 x .75 Lg.*		54	748-0237		Pinion Gear	
10	710-0255		Truss Mach. Scr. 1/4-20 x .75" Lg.*		55	736-0242		Belleville Wash. .345 I.D. x .88 O.D.	
11	11836 —462		Hood	N	56	712-0237		Hex Cent. L-Nut 5/16-24 Thd.	
12	731-0563		Grille—Complete		57	710-0180		Hex Scr. 3/8-24 x .75" Lg.*	
13	736-0169		L-Wash. 3/8" I.D.*		58	736-0105		Belleville Wash.	
14	712-0287		Hex Nut 1/4-20 Thd.*		59	748-0236		Bevel Gear	
15	736-0329		L-Wash. 1/4" Scr.*		60	741-0199		Plastic Flanged Brg.	
16	710-0377		Hex Sems Bolt 1/4-20 x .62" Lg.* (395)		61	710-0325		Hex Scr. 3/8-24 x .50" Lg.*	
17	736-0253		Belleville Wash. .515 I.D. x 1.00" O.D.		62	731-0484		Hub Cap	
18	738-0145		Shld. Scr. .498 Dia. x .835" Lg.		64	12749		Steering Arm Shaft Ass'y.	
19	723-0305		Foot Mat—L.H.		65	710-0670		Hex Scr. Nylon 3/8-16 x 1.25" Lg.	
20	736-0119		L-Wash. 5/16" Scr.*		66	11055		Transmission Belt Guard	
21	712-0267		Hex Nut 5/16-18 Thd.*		67	13879 —462		Lower Frame	
22	13880 —462		Upper Frame		68	731-0534		Battery Box (395)	
23	738-0307		Steering Shaft		69	712-0287		Hex Nut 1/4-20 Thd.* (395)	
24	12746 —462		Front Pivot Bracket		70	736-0142		Fl-Wash. .281 I.D. x .500" O.D. x .063 (395)	
25	736-0158		L-Wash. 5/8" Scr.*		71	12934		Transmission Support Brkt.	
26	710-0312		Hex Scr. 5/8-18 x 1.31—Special		72	732-0256		Seat Spring 3.25 High	
27	712-0923		Hex Cent. Jam Nut 5/8-18 Thd.		73	736-0921		L-Wash. 1/2" Scr.*	
28	726-0159		Push Nut .625" Shaft		74	712-0206		Hex Nut 1/2-13 Thd.*	
29	741-0225		Hex Flange Brg.		77	09963 —462		Hitch Bracket	
30	13274 —462		Pivot Bar Ass'y.		79	11002 —462		Rear Fender	
31	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		80	710-0195		Hex Scr. 1/4-28 x .62" Lg.*	
32	14453		Axle Ass'y.—Front—L.H.		82	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
33	711-0198		Ferrule		83	13881 —462		Transmission Panel	
34	747-0144		Tie Rod		84	11002 —462		Rear Fender	
35	741-0313		Flange Bearing .630 I.D.		85	725-0201		Ignition Key Only	
36	734-1044		Front Wheel Ass'y.—Comp. 11.0 x 4.0			725-0266		Ignition Switch (Not Shown) (390)	
37	725-0514		12 V Battery (395)			725-0267		Ignition Switch (Not Shown) (395)	
38	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	N	86	11263		Plastic Handle (390)	
39	14452		Axle Ass'y.—Front—R.H.		87	731-0511		Trim Strip 12" Lg.	
40	712-0711		Hex Jam Nut 3/8-24 Thd.		89	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
41	711-0625		Steering Rod		90	712-0138		Hex Nut 1/4-28 Thd.*	
42	746-0160		Throttle Control Ass'y.		91	723-0156		Ball Joint Ass'y. 3/8-24 Thd.	
43	710-0351		Truss Mach. B-Tap Scr.#10 x .50" Lg.		92	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
					93	710-0216		Hex Scr. 3/8-16 x .75" Lg.*	
					94	736-0169		Lock Washer 3/8" I.D.*	
					95	712-0798		Hex Nut 3/8-16 Thd.*	
					96	712-0344		Speed Nut #10	

Models 390 and 395



NOTE: If for any reason, disc brake is disassembled, be sure round end of push pins (Ref. No. 51) is toward the cam lever (Ref. No. 50).

Models 390 and 395

PARTS LIST FOR MODELS 390 AND 395 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	712-0429		Hex Ins. L-Nut 5/16-18 Thd.		43	712-0287		Hex Nut 1/4-20 Thd.	
2	735-0126		Rubber Wash. .33 I.D. x .87 O.D.		44	761-0147		Blade Brake Ass'y.	
3	08118		Grip Finger—Black		45	726-0121		Push Cap .250 Dia.	
4	749-0212		Lift Handle—R.H.		46	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.	
5	13630		Lift Handle Brkt. Ass'y.		47	761-0130		Disc Brake Ass'y.—Comp.	
6	736-0219		Belleville Wash. .40 I.D. x 1.13 O.D.		48	HH-02-03631		Hex Lock Nut	
7	710-0201		Hex Hd. Cap Scr. 3/8-16 x .62" Lg.*		49	HH-03-03032		Washer	
8	—		Engine		50	HH-18-03493		Cam Lever	
9	710-0442		Hex Hd. Cap Scr. 5/16-18 x 1.50" Lg.*		51	HH-05-03034		Push Pin	
10	13851		Lockout Link Ass'y.		52	HH-03-03303		Disc Backup	
11	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		53	HH-15-02124		Friction Pad 1.110" Dia. x .472 Thk.	
12	736-0192		FI-Wash. .531 I.D. x .93 O.D.		54	710-0176		Hex Hd. Cap Scr. 5/16-18 x 2.75" Lg.	
13	14021		Handle Pivot Brkt.		55	761-0133		Spacer for Disc Brake .322 I.D. x .38" Lg.	
14	735-0195		Rubber Wash.		56	11010		Brake Plate	
15	736-0237		Flat-Wash.		57	HH-12-03292		Casting—Carrier Side	
16	748-0273		Spacer .632 I.D. x .88 O.D.		58	HH-15-03149		Friction Pad 1.110" Dia. x .245 Thk.	
17	717-0416		Three Speed Trans.—Comp.		59	HH-12-03292		Casting—Cam Side	
18	747-0172		Shift Lever		60	717-0318		Differential Ass'y. Comp.	
19	720-0165		Ball Knob		61	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
20	710-0134		Carriage Bolt 1/4-20 x .62" Lg.*		62	732-0157		Spring .380 O.D. x 3.25" Lg. (Brake Return)	
21	14219		Brake Pedal Ass'y.		63	747-0107		Brake Rod .250 Dia. x 24.12" Lg.	
22	738-0140		Shld. Scr. .431 Dia. x .18" Lg.		64	710-0627		Hex Scr. w/Lock 5/16-24 x .750" Lg.	
23	732-0191		Spring (Idler) .75 O.D. x 11.0" Lg.		66	734-0521		Rear Wheel—Rim Ass'y. Less Tire	
24	712-0116		Hex Ins. L-Nut 3/8-24 Thd.		67	734-0427		Rear Wheel—Tire Only 15.0 x 6.0	
25	12446		Idler Brkt. Ass'y.		68	736-0134		FI-Wash.	
26	732-0245		Brake Spring		69	741-0199		Flange Brg.	
27	726-0100		Push Nut 3/8" Dia. Rod		70	710-0437		Chain Adj. Link 5/16-18 Thd.	
28	11061		Clutch Rod		71	11009		Rear Axle Brkt.	
29	11057		Clutch Lockout Lever Ass'y.		72	713-0104		#41 Chain 1/2 Pitch x 63 Links	
30	14220		Clutch Pedal Ass'y.		73	10364		Rear Axle Plate	
31	735-0201		Foot Pad (Clutch and Brake)		74	10360		Axle Bolt Plate Ass'y.	
32	12654		Engine Belt Guard Ass'y.		75	11011		Disc Brake Brkt. Ass'y.	
33	736-0242		Belleville Wash. .345 I.D. x .88 O.D.		76	11024		Deck Link	
34	738-0215		Shld. Bolt .498 Dia. x 3.00" Lg.		77	09721		Pivot Link Ass'y.	
35	736-0119		L-Wash. 5/16" Scr.*		78	11014		Connecting Lift Brkt.	
36	712-0267		Hex Nut 5/16-18 Thd.*		79	714-0101		Int. Cotter Pin 1/2" Dia.	
37	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*		80	11023		Deck Link Ass'y. (3 Req'd.)	
38	12160		Belt Keeper Ass'y.		81	711-0332		Left Brkt. Pin	
39	10426		Belt Keeper Ass'y.		82	11249		Ht. Adj. Knob	
40	738-0373		Shld. Bolt .498 Dia. x 1.525" Lg.		83	11027		Handle Stop Brkt. Ass'y.	
41	11039		Pedal "U" Brkt. Ass'y.		84	12934		Reinforcement Brkt.	
42	11056		Parking Brake Lever Ass'y.		85	749-0466		Reinforcement Brkt.	
					86	HH-06-03031		Spring	

WHEEL CHART

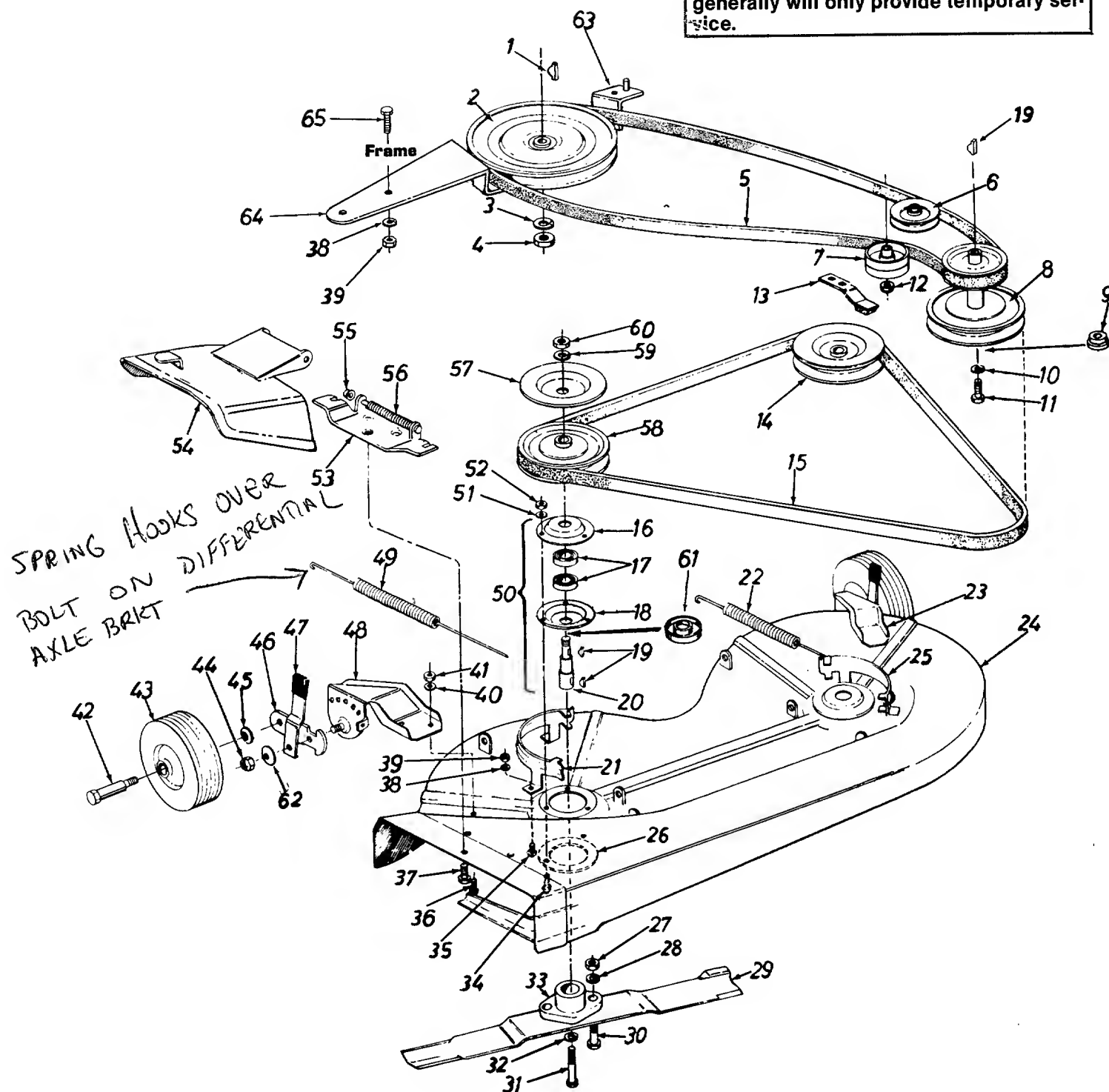
Front Wheel		Rear Wheel	
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
734-1044	Wheel Ass'y. Comp. 11.0 x 4.0	734-0524	Wheel Ass'y. Comp. 15.00 x 6.00
734-1042	Rim Ass'y.	734-0521	Rim Ass'y. with Hub
734-0770	Tire Only 11.0 x 4.0	734-0427	Tire Only Tubeless 15.00 x 6.00
741-0313	Flange Brg. Front Wheel	741-0199	Bearing—Rear Wheel
		734-0255	Air Valve

Models 390 and 395



IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide temporary service.



Models 390 and 395

PARTS LIST FOR MODELS 390 AND 395 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.		35	710-0289		Hex Hd. Cap Scr. 1/4-20 x .50" Lg.*	
2	756-0174		Transmission Split Pulley .50 I.D.		36	710-0289		Hex Hd. Cap Scr. 1/4-20 x .50" Lg.*	
3	736-0921		L-Wash. 1/2" Scr.*		37	710-0195		Hex Hd. Cap Scr. 1/4-28 x .62" Lg. (3 Req'd.)	
4	712-0922		Hex Jam Nut 1/2-20 Thd.		38	736-0329		L-Wash. 1/4" Scr.*	
5	754-0198		"V" Belt 1/2 x 62" Lg. (Drive Belt)		39	712-0287		Hex Nut 1/4-20 Thd.*	
6	756-0116		"V" Idler 3.06 O.D.		40	736-0329		L-Wash. 1/4" Scr.*	
7	756-0217		"P" Flat Idler 2.75 O.D.		41	712-0287		Hex Nut 1/4-20 Thd.*	
8	756-0246		Two-Step Engine Pulley		42	738-0373		Axle Bolt .498 Dia. x 1.53" Lg.	
9	711-0572		Step Washer for Engine Pulley		43	734-0973		Wheel Ass'y.—Comp. 5 x 1.38 Dia.	
10	736-0217		L-Wash. 3/8" Scr.*		44	712-0181		Hex Jam L-Nut 3/8-16 Thd.	
11	710-0151		Hex Hd. Cap Scr. 3/8-24 x 2.00" Lg.*		45	736-0105		Belleville Wash. .345 I.D. x .88 O.D.	
12	712-0116		Hex Inserted L-Nut 3/8-24 Thd.		46	10937		Wheel Pivot Bar	
13	761-0174		Blade Brake Assembly		47	14082		Spring Lever Ass'y. with Knob	
14	756-0251		Deck Pulley 4.75 O.D. (2 Req'd.)		48	09080		Wheel Brkt. Ass'y. R.H.	
15	754-0167		"V" Belt 21/32 x 64" Lg. (Blade Belt)		49	732-0307		Deck Spring	
16	08253		Housing—Bearing		50	09321		Blade Spindle Ass'y.—Comp.	
17	741-0919		Ball Brg. .787 I.D. x 1.85 O.D.		51	736-0119		L-Wash. 5/16" Scr.*	
18	08253		Housing—Bearing		52	712-0267		Hex Nut 5/16-18 Thd.	
19	714-0365		#6 Hi-Pro Key 5/32 x 5/8" Dia.		53	11399		Adapter Plate Ass'y.	
20	711-0255		Blade Spindle		54	11633		Chute Cover Ass'y.	
21	12673		Belt Guard R.H.—Deck		55	726-0106		Push Nut 1/4" Rod	
22	732-0307		Deck Spring		56	732-0261		Torsion Spring	
23	09082		Wheel Bracket Ass'y.—L.H.		57	09322		Blade Brake—Disc	
24	13962		30 In. Deck Assembly		58	756-0251		Deck Pulley 4.75 O.D. (2 Req'd.)	
25	12672		Belt Guard L.H.—Deck		59	736-0158		L-Wash. 5/8" Scr.*	
26	09164		Deck Reinforcement Plate		60	712-0242		Hex Jam Nut 5/8-11 Thd.	
27	712-0123		Hex Nut 5/16-24 Thd.*		61	13703		Bearing Shield	
28	736-0119		L-Wash. 5/16" Scr.*		62	736-0219		Bell-Wash.	
29	742-0118		15 In. Blade (2 Req'd.)		63	10426		Belt Keeper Ass'y.	
30	710-0117		Hex Hd. Cap Scr. 5/16-24 x 1.00" H.T.		64	11055		Transmission Belt Guard	
31	710-0459		Hex Hd. Cap Scr. 3/8-24 x 1.50" H.T.		65	710-0255		Truss Hd. Mach. Scr. 1/4-20 x .75" Lg.	
32	736-0217		L-Wash. 3/8" Scr. H.D.		66	710-0342		Hex Bolt 3/8-16 x 1.00" Lg.	
33	748-0189		Blade Adapter		67	748-0279		Shoulder Spacer	
	10769		Blade Adapter Kit			13978		Deck Ass'y.—Complete (For Service Only)	
34	710-0322		Hex Sems Cap Scr. 5/16-18 x 1.00" Lg.* (3 Req'd.)						

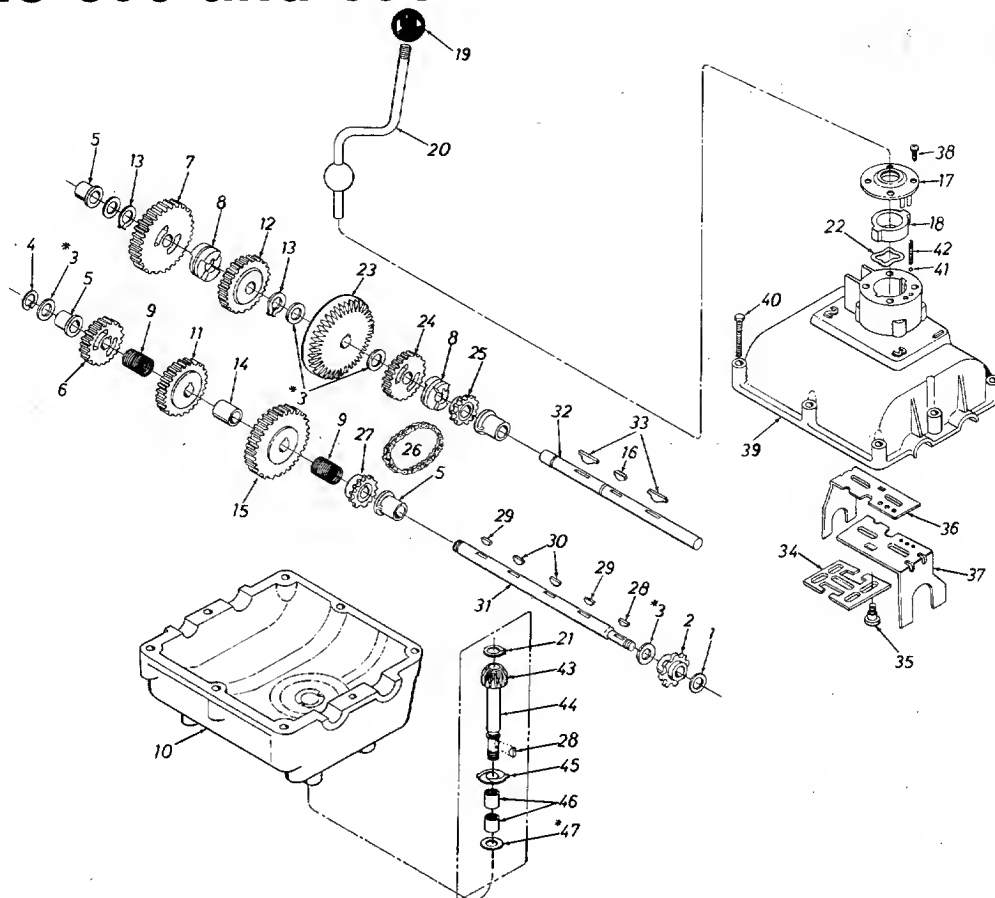
For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake) When ordering parts if color or finish is important, use color code shown at left. (e.g. Red Flake Finish—11001 (462).)

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



Models 390 and 395

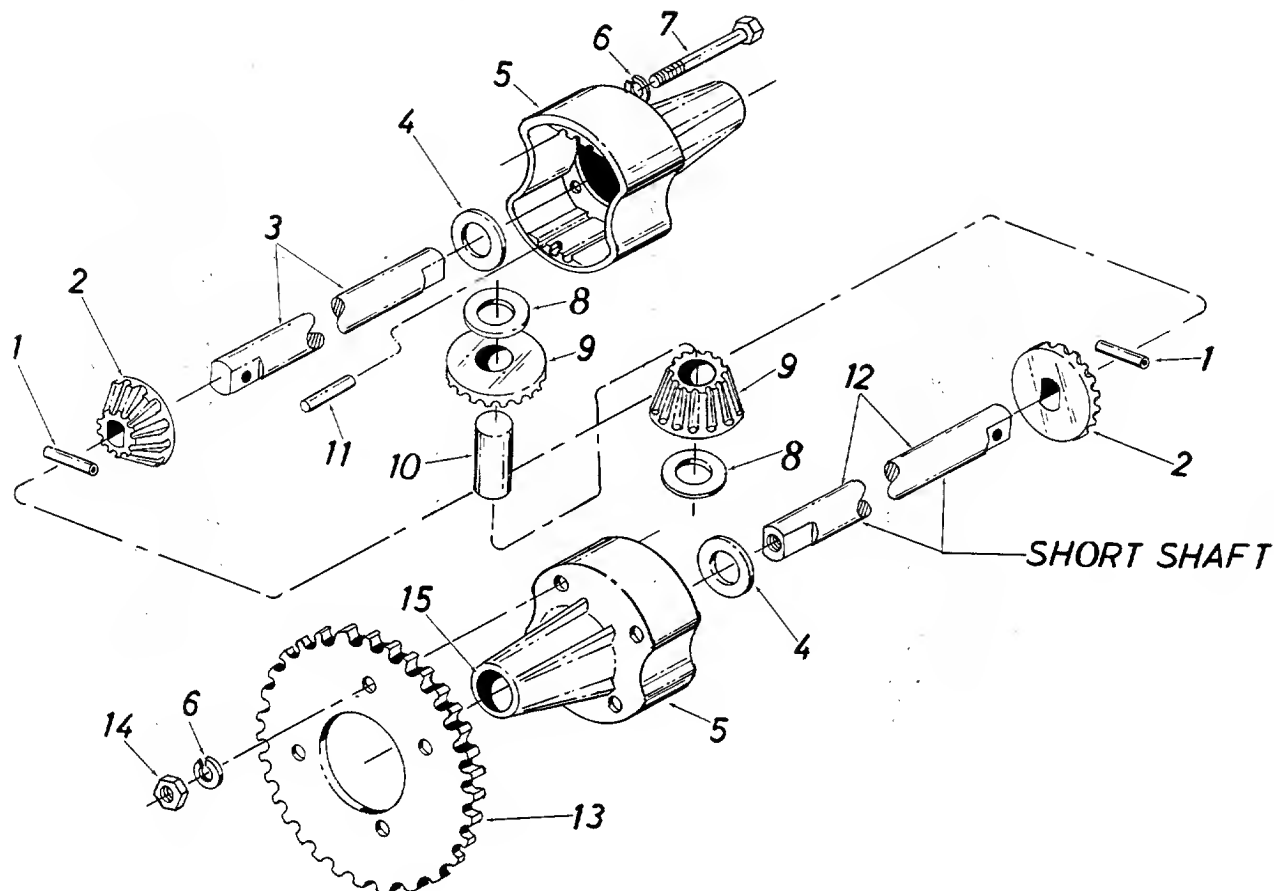


PARTS LIST FOR TRANSMISSION MODEL 717-0416

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION	REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION
1	FF-1300	1	Ring, Retaining	23	FF-1085	1	Gear, Bevel, 42T
2	FF-1084	1	Sprocket, 8T	24	FF-1071	1	Gear, Spur, 20T
3	FF-1068	*	Washer, Plain (.040)	25	FF-1087	1	Sprocket, 12T, Special
3	FF-1082	*	Washer, Plain (.031)	26	FF-1090	1	Chain
3	FF-1145	*	Washer, Plain (.060)	27	FF-1104	1	Sprocket, 12T, Special
3	FF-1358	*	Washer, Plain (.050)	28	FF-1371	2	Key, Wdrf., No. 4 Alloy
3	FF-1423	*	Washer, Plain (.025)	29	FF-1369	2	Key, Wdrf., No. 3 Alloy
3	FF-1424	*	Washer, Plain (.035)	30	FF-1375	2	Key, Wdrf., No. 61 Alloy
3	FF-1425	*	Washer, Plain (.045)	31	FF-1094	1	Shaft, Output
3	FF-1441	*	Washer, Plain (.020)	32	FF-1443	1	Shaft, Drive
4	FF-1106	1	Ring, Retaining	33	FF-1086	2	Key, Hi-Pro, Special
5	FF-1101	4	Bearing, Flange	34	FF-1074	1	Plate, Lock-out
6	FF-1072	1	Gear, Spur, 20T	35	FF-1073	4	Screw, Shoulder
7	FF-1444	1	Gear, Spur, 30T	36	FF-1657	1	Fork, Shifter, R.H.
8	FF-1083	2	Collar, Clutch	37	FF-1070	1	Fork, Shifter, L.H.
9	FF-1095	2	Spring, Compression	38	FF-1357	4	Screw, No. 10-24 x 1/2
10	FF-1064A	1	Housing, Lower	39	FF-1065J	1	Housing, Upper
11	FF-1076	1	Gear, Spur, 25T	40	FF-1360	8	Bolt, Hx. Hd., 1/4-20 x 1-5/16
12	FF-1075	1	Gear, Spur, 25T	41	FF-1037	2	Ball, Detent
13	FF-1099	2	Ring, Retaining	42	FF-1475	2	Spring, Detent
14	FF-1325	1	Spacer	43	FF-1105	1	Pinion, Bevel, 16T
15	FF-1078	1	Gear, Spur, 30T	44	FF-2571	1	Shaft, Input
16	FF-1374	1	Key, Wdrf., No. 9 Alloy	45	FF-1499	1	Washer, Thrust
17	FF-1670	1	Cover, Nylon	46	FF-1102	2	Bearing, Needle
18	FF-1091	1	Insert, Nylon	47	FF-1430	*	Washer, Plain (.040)
19	FF-1318	1	Knob, Shift	47	FF-1431	*	Washer, Plain (.050)
20	FF-2683	1	Assembly, Lever, Shift	47	FF-1760	*	Washer, Plain (.015)
21	FF-1100	1	Ring, Retaining				
22	FF-1096	1	Washer, Wave				

*Indicates used in various combinations to maintain proper clearances.

Models 390 and 395



Lubricate with 3 oz. High Temp. Grease Plastilube #0. Order Part No. 737-0166.

PARTS LIST FOR DIFFERENTIAL ASSEMBLY 717-0318

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION	NEW PART
1	715-0247	2	Spring Pin Spiral 3/16" Dia. x 1.00" Lg.	
2	748-0156	2	Gear—Double "D" Hole	
3	738-0302	1	Shaft (Long)—15.11" Lg.	
4	736-0188	2	FI-Wash. .760 I.D. x 1.49 O.D.	
5	719-0150	2	Housing Half	
6	736-0119	8	L-Wash. 5/16" I.D.*	
7	710-0526	4	Hex Bolt 5/16-24 x 4.00" Lg.	
8	736-0187	2	FI-Wash. .640 I.D. x .24 O.D.	
9	748-0158	2	Gear—Round Hole	
10	711-0276	1	Drive Pin	
11	715-0123	2	Dowel Pin 3/16" Dia. x .62" Lg.	
12	738-0303	1	Shaft (Short)—7.58" Lg.	
13	09054	1	Sprocket—40 Teeth	
14	712-0237	4	Hex Cent. L-Nut 5/16-24 Thd.	
15	748-0169	2	Flange Bearing	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	BIRMINGHAM
Auto Electric & Carburetor Co.	2625 4th Ave. S.35233
ARKANSAS	FORT SMITH
Mity Mite Motors, Inc.	4515 S. 16th St.72901
	NORTH LITTLE ROCK
Sutton's Lawn Mower Shop	Rt. 4, Box 36872117
CALIFORNIA	PORTERVILLE
Billious	75 North D Street93257
COLORADO	DENVER
Spitzer Industrial Products Co.	6601 N. Washington St., Box 2911480229
FLORIDA	JACKSONVILLE
Radco Distributors	4909 Victor St., Box 545932207
	OPA LOCKA
Small Eng. Dist.	2351 N.W. 147th St.33054
GEORGIA	EAST POINT
East Point Cycle & Key	2834 Church St.30344
ILLINOIS	LYONS
Keen Edge Co.	8615 Ogden Ave.60534
INDIANA	ELKHART
Parts & Sales Inc.	2101 Industrial Pkwy.46514
IOWA	DUBUQUE
Power Lawn & Garden Equip.	2551 J.F. Kennedy52001
LOUISIANA	NEW ORLEANS
Suhren Engine Co.	8330 Earhart Blvd.70118
MARYLAND	TAKOMA PARK
Center Supply Co.	6867 New Hampshire Ave.20012
MASSACHUSETTS	SPRINGFIELD
Morton B. Collins Co.	300 Birnie Ave.01107
MICHIGAN	LANSING
Lorenz Service Co.	2500 S. Pennsylvania48910
	MOUNT CLEMENS
Power Equipment Dist.	340 Hubbard48043
MINNESOTA	HOPKINS
Hance Distributing Inc.	420 Excelsior Ave. W.55343
MISSISSIPPI	BILOXI
Biloxi Sales & Service, Inc.	506 Caillavet St.39533
MISSOURI	KANSAS CITY
Automotive Equip. Service	3117 Holmes St.64109
	ST. JOSEPH
Ross-Frazier Supply Co.	8th and Monterey64503
	ST. LOUIS
Henzler, Inc.	2015 Lemay Ferry Rd.63125
NEW JERSEY	BELLMAR
Lawnmower Parts Inc.	717 Creek Rd.08030
NEW MEXICO	ALBUQUERQUE
Spitzer Eng. & Parts	1023 Third St. N.W.87103
NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave.13619

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NORTH CAROLINA	GOLDSBORO
Smith Hardware Co.	515 N. George St.27530
	GREENSBORO
Dixie Sales Company	335 N. Green27402
OHIO	CARROLL
Stebe's Mid-State Mower Supply	71 High St., Box 36643112
	CLEVELAND
Bleckrie, Inc.	7900 Lorain Ave.44102
	WADSWORTH
National Central	687 Seville Rd.44281
	YOUNGSTOWN
Burton Supply Co.	1301 Logan Ave., Box 92944501
OKLAHOMA	MUSKOGEE
Victory Motors, Inc.	605 S. Cherokee74401
OREGON	PORTLAND
Kenton Supply Co.	8216 N. Denver Ave.97217
PENNSYLVANIA	HARRISBURG
EECO Inc.	4021 N. 6th St.17110
	PHILADELPHIA
Thompson Rubber Co.	5222-24 N. Fifth St.19120
	PITTSBURGH
Bluemont Co.	11125 Frankstown Rd.15235
	PUNXSUTAWNEY
Frank Roberts & Sons	R.D. 215767
TENNESSEE	KNOXVILLE
Master Repair Service	2000 Western Ave.37921
	MEMPHIS
American Sales & Service, Inc.	3035-43 Bellbrook38116
TEXAS	DALLAS
Marr Brothers, Inc.	423 E. Jefferson75203
	FORT WORTH
Woodson Sales Corp.	1702 N. Sylvania76111
	HOUSTON
Bullard Supply Co.	2409 Commerce St.77003
UTAH	SALT LAKE CITY
A-1 Engine & Mower Co.	437 E. 9th St.84111
VERMONT	BURLINGTON
Vermont Hdwe. Co. Inc.	180 Flynn Ave.05401
VIRGINIA	ASHLAND
RBI Corp.	Lake Ridge Park, 101 Cedar Run Dr.23005
WASHINGTON	SEATTLE
Bailey's Inc.	1414 14th Ave.98102
WEST VIRGINIA	CHARLESTON
Young's, Inc.	233 Virginia St., E.25301
WISCONSIN	MARSHFIELD
Power Pac	301 E. 29th St.54449

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.